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ABSTRACT

A 6-year study of outdoor-based management training (OMT) programs used traditional evaluation methods and new methods designed specifically for these unique programs. A survey of 1,000 training directors indicated that this type of training was very controversial. The next step was to use traditional training and organizational behavior evaluation methodologies to explore the impact of a 1-day ropes course on group and individual behaviors. Evaluation work was based on Kirkpatrick's (1994) four levels of evaluation: reaction, learning, behavior, and results. Two types of behavior were evaluated through a Likert-type questionnaire: individual and group. Results indicated a significant improvement in the overall functioning of the work group but no significant changes in individual behavior. Some participant variables found to influence the effectiveness of outdoor programs were as follows: intact/nonintact work groups, volunteers/nonvolunteers, gender composition of groups, supervisor attendance at the program, indoor/outdoor, and the facilitators. The evaluation was expanded to use a control group, open-ended questions, focus group interviews, a structured on-the-job observation, and participant journals. Evaluations of programs in other countries produced evidence that the programs had an impact on the overall culture of the organization. Two issues for the future were identified: the need to certify facilitators and the need to look at the underlying conceptual framework. (Contains 10 references.) (YLB)

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RESEARCH ON THE EFFECTIVENESS OF OUTDOOR MANAGEMENT TRAINING

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An increasing number of organizations are using outdoor-based management training (OMT) programs for individual managers, management teams and work groups. Training organizations throughout the world currently offer some type of outdoor training. Participants in OMT range from Fortune 100 executives to nurses to civic group volunteers. A number of organizations have even developed their own outdoor training programs and Universities are sending people "to the woods" as part of their traditional education programs.

Of course, fads in training are nothing new. At one time or another, trainers have tried virtually everything in pursuit of more effective managers and teams. But what is so intriguing about the OMT movement is the intensity of the debate regarding its utility as a training strategy. On the one hand, anecdotal support is voluminous. One need not look far to find former participants who will attest that their experience in an OMT program was highly beneficial (e.g., Long, 1987; Broderick, 1989). Several published accounts even recant participant statements which suggest that OMT experiences are far superior to training in more traditional environments. Even top executives are among the converts. For example, Nike Corporation Vice-President Nelson Farris has said, ... "I think every one of our employees should go through it, not just some people. We are looking for ways to get people to open their minds and deal with the process of change --this program will help our company" (MacNeil-Lehrer, 1989). OMT has also evoked fervent opposition. Skeptics contend that such programs are, at best, a waste of time and, at worst, may even detract from managerial effectiveness. Ron Zemke, Senior Editor of Training Magazine, suggested that ..."outdoor programming is nothing more than an opportunity for organizations to pack whole management teams off to risk life and limb together" (1989). Jack Falvey, writing in the Wall Street Journal, argued that ..."building outdoor party games and simulations, when the real work to be done is all around, should be grounds for managerial malpractice indictments" (1988).

Despite the dramatic growth in corporate expenditures on outdoor-based training and the controversy, we find that many management and training professionals have little understanding of what outdoor-based training is, where it came from, or what it purports to do. At the same time, we have observed that there seems to be a pervasive desire to learn more about this intriguing training phenomenon. Most managers

we talk to have heard or seen something about "this outdoor training stuff" but are reserving judgment until they can learn more about what really is involved. Unfortunately, the speed with which outdoor training has permeated organizational training and development has surpassed the associated literature on the topic. For example, the first standard reference for the manager who wishes to learn more about OMT, particularly in the corporate setting was just recently published (Roland, Wagner & Weigand, 1995).

In an article entitled "Outdoor Training: Revolution or Fad?" (Training & Development Journal, 1991) Wagner, Baldwin & Roland point out the need to develop effective research programs to validate OMT programs. If these programs are to become long-term, viable training methods, it is essential to validate their use. This article summarizes our six year efforts to research OMT programs using traditional training evaluation methods, and new methods designed specifically for these unique programs.

The history of evaluating OMT

Our efforts to evaluate OMT programs began in the Spring of 1989. Chris Roland of Roland/Diamond, Keene, New Hampshire had designed and built a 1-day ropes course training program at a U.S. Navy installation in Indiana. After the first year of training Chris contact Tim Baldwin and Dick Wagner (then at Indiana University) and worked with them to develop an evaluation of this program (training over 300 people per year). We first developed a "benchmarking" study to see how other OMT programs were evaluated. An exhaustive literature review in the U.S. and then around the world yielded very disappointing results. Only a handful of studies were found, and almost all of these studies were flawed in some way.

Many of the studies were done by the consulting firm which was conducting the program - causing a concern about the objectivity of the study. Almost all of the studies were based on a very small sample size - sometimes conclusions were based on studies of as few as three trainees. In addition to the small sample sizes, many of the studies were based solely on observational data from one observer. Thus, for example, many studies consisted of the trainer observing three or four trainees during an outdoor program, and writing up his/her comments the program. Research of the this type makes it impossible to validate a program as complex as outdoor management training.

Initial evaluation efforts

We had two distinct advantages when we began our evaluation efforts: First, we had a sample size of at least 300 the first year, and potentially as big as 5,000; and second, we were associated with a University and were not actually conducting the outdoor training programs. In addition, the members of the initial research team (Wagner & Baldwin) came from "traditional" training backgrounds, and were not particularly "sold" on outdoor training. This tended to increase our objectivity.

We began with a survey of 1,000 U.S. Training Directors to try to get a "feel" for what outdoor training was all about. This survey told us that this type of training is very controversial, and was summarized in Training & Development Journal (Wagner, Baldwin & Roland, 1991). Our next step was to use traditional training and organizational behavior evaluation methodologies to explore the impact of this 1-day ropes course on both group and individual behaviors.

We have based our evaluation work on Kirkpatrick's four levels of evaluation (Kirkpatrick, 1994), as follows:

REACTION: How the participants feel about the program. It is really a measure of "customer satisfaction".

LEARNING: To what extent did participants change their attitudes, improve their knowledge and increase their skills?

BEHAVIOR: To what extent did the participants change their on-the-job behavior?

RESULTS: What final results occurred? This would include such factors as increased sales, improved quantity of production, improved quality, reduced costs, reduction of accidents, reduction in turnover, increased profits and return on investments.

The initial goal of our evaluation efforts was to determine what behavioral changes, if any, occurred after people had participated in an OMT program, and how people reacted to these programs. Based on previous research in the area of team building, we evaluated two types of behaviors: individual behaviors (self-esteem. locus of control, faith and confidence in peers); and group behaviors (cohesiveness, clarity, homogeneity, problem solving and the overall process of the group). We developed a questionnaire to allow us to evaluate these reactions and behaviors on a pre-post-post basis, using either a 5-point or 7-point Likert scale (1 = strongly agree, 7 = strongly disagree)..

Initial evaluation findings

The results of these initial evaluation efforts were published in Training & Development Journal (Wagner & Roland, 1992). This research has consistently shown a significant improvement in the overall functioning of their work group after the group had attended an OMT program. On the other hand, no significant changes have been reported in the individual behavioral variables.

While these evaluation efforts strongly suggested that outdoor management training programs are effective in improving group process and interaction skills, we found that this improvement did not occur for all participants uniformly. Some of the participant variables that we have found to impact the effectiveness of outdoor programs are discussed below.

Intact/Non-intact work groups: Many indoor management training programs have involved training workers who were strangers to each other prior to the actual training program. The rationale for these programs was that strangers often react more honestly with each other than will those who work together on a daily basis. Our evaluations show that intact work teams (those who interact at work on a regular basis) benefit significantly more by attending OMT programs than do those people from non-intact work groups.

Volunteers/non-volunteers: Most training manuals suggest that only volunteers should attend training programs. Almost half of the participants in this program did not volunteer to attend the program. Despite having been "forced" to attend OMT, the behavioral changes in the non-volunteers was not significantly different than it was for those who volunteered to attend the program.

Gender composition of the group: Another interesting finding concerned the gender composition of the work groups attending the program. The groups in the programs we studied ran the gamut from all female to all male. Most groups contained a varying number of both males and females. We found that groups with a balance of both males and females showed a greater improvements than did those groups which were either male dominated or female dominated.

Supervisor attendance at the program: Slightly over one-half of the groups we evaluated attended the program with their supervisor. We expected the presence or absence of the supervisor to impact the

effectiveness of the program. We were surprised to discover that the only significant impact the supervisor's presence had on the group was that those groups who attended with their supervisor liked the program better. As far as changes in group behaviors, we found no significant difference attributable to the presence of the group's supervisor.

Indoor versus outdoor: Many people have argued that it is the outdoor setting itself that enhances the success of this type of training. Our research does not support this, since the success of our programs was unrelated to how much of the training was held outdoors. Our continuing research strongly suggests that it is the process, and not the setting which facilitates the behavior changes (Clements, Wagner & Roland, in press).

The Facilitators: A key element in any training effort involves the trainers or facilitators. We have consistently found that significant differences between program effectiveness can be explained, at least in part, by the skill of the facilitator. in two key group behaviors: effectiveness and awareness. For the first year of the Navy program facilitator training consisted mainly of on-the-job (OJT) type of training, emphasizing primarily the "activity process" and safety aspects of facilitating the outdoor program. Before the start of the second year's program each facilitator participated in an intensive facilitator training program, emphasizing two areas in addition to the OMT activities: relationship to on the job activities; and debriefing/ human behavior skills.

A comparison of the two programs indicated that the second year's program was significantly more effective, especially in the area of group effectiveness. Since the only key change from the first year's program to the second year's program was the training of the facilitators, we felt that the training of facilitators in the areas of business and human behavior significantly increased the effectiveness of the OMT program. Our continuing research has strengthened this finding that effective facilitation skills for outdoor programs includes actual business skills and human behavior/group process skills, in addition to the activities skills.

Expanded evaluation methodologies

While the self-report questionnaires provided us a lot of useful and informative data, we quickly

became aware of the lack of depth that using a pre-post-post methodology offered us. Our first addition was the use of a control group, in addition to the training group. The use of a control group is important if we are to make inferences based on any changes found in trained group. The measure of interest is the "change score" - the post score minus the pre score. If the trained group had a change of from the pre to the post we might be tempted to say that this suggests that the training was effective. However, this could be an erroneous conclusion since some "external condition", such as a new manager, a change in policy or procedure, could have caused a change for the entire company - with or without training. However, if a control group is used, and trained group shows an increase, but the untrained (control group) does not, we have a much better case for saying the training program was effective.

Since, when working with corporate work teams, random assignment to the two groups (trained/control) is usually impossible, the alternative solution we often use is the concept of a "stratified group". Using this technique, the members of the control group are "matched" to the members of the trained team on the basis of potentially important differences. For example, if the trained group contains 6 females and 12 males, the control group should consist of "approximately" the same mix males and females.

A second method we began to use was to include open-ended, behaviorally oriented questions on the post questionnaires. These allowed the trainees to amplify their ratings on the questionnaires, but also require them to link this response to an actual job behavior. For example, after giving an item a high rating (I feel free to ask my peers for help when I need it), we would ask a participant to tell us why he/she gave this rating, and then ask them to give an <u>example</u> from work to justify this response.

The use of open-ended questions was developed for use in long-distance evaluations. Initially, we limited our evaluations to nearly organizations, but as our database grew and we began to publish some of our data we also began to evaluate programs all over the U.S. and then internationally. For the local programs we next began conducting interviews with the program participants. In some cases we used individual interviews, based on questions similar to the open-ended questions discussed

above. We also began to use focus-group interviews when time was limited, or we were dealing with large groups of participants.

Along with participant interviews we also used a structured on the job observation to evaluate behaviors, and developed a series of behavioral questionnaires given to subordinates, supervisors and peers who had not attended the training program. In this way we were able to confirm the rating provided by the participants from independent observers who are familiar with the participants behaviors at work. For many programs we have successfully used video-taping as an evaluation method. This allows us to review the program at some leisure, and to gather comments from a number of trained observers.

For multiple day programs we have also used participant journals with some limited success. Journals filled out several times a day during a 3 - 5 day (or longer) program offers us a great deal of information. Two problems we have run into with journals are getting them to be filled out on a regular basis during the program, and being able to deal with many pages of data filled out by 15 or 20 participants in a program. We have found that scheduling a series of specific times during each day to complete the journal entries helps to get the journals filled out in a timely manner. Dealing with all the data can be made easier by structuring a number of specific questions into the journals. This eases the problem of interpreting the large volume of data.

International outdoor management training evaluation

By 1992 our evaluation efforts in the U.S. had involved over 30 organizations, over 300 groups and over 5,000 program participants. In the U.S. our efforts had focused primarily on the impact of outdoor management training programs on team-building behaviors. We began finding interest in evaluating programs from around the world, including: Canada, South Africa, Australia, New Zealand, Germany, Belgium, England and Singapore.

Evaluations of programs in some of these countries also focused on team-building as a goal. However, we also began to find evidence that something beyond team-building was taking place. In evaluations in the U.S. and with John Campbell of Executive & Staff Training (EAST) of Harrogate, England. we found growing evidence that these programs could have, in addition to their team-building

impact, also have a powerful impact on the overall culture of the organization. This includes such areas as: style of management (authoritarian versus participative); the empowerment of the employees to act in their own best interest at work; and the changing work environment many organizations face as the globalization of the work force takes place throughout the world.

Issues for the future

After six years of evaluating outdoor management training programs, where do we go from here. First of all, we believe that the international efforts will continue to grow in the coming years.
We also believe the need for new methods of evaluation will be needed. For example, while behavioral observations have been the focus of our efforts, we are more and more focusing efforts on Kirkpatrick's fourth evaluation level - results. As more organizations train larger segments of their workforce we are better able to evaluate outdoor management training programs using bottom line results like productivity, turnover, sales and profits.

Within the framework of outdoor management training we see the focus on two issues: the need to evaluate, train and certify facilitators; and the need to look at the conceptual framework underlying outdoor management programs. As discussed earlier, the facilitator can make all the difference in determining the effectiveness of the program. Many facilitators of outdoor management programs have initially come from an "outdoor" background. They are often hikers, campers, rock-climbers, etc., and have adapted these skills to training managers. Unfortunately, many of these facilitators lack in-depth organizational or group process knowledge, and their programs have suffered accordingly. Research is needed to develop better training and certification programs for facilitators.

An often related problem is the lack of a conceptual framework for many programs. While we commonly hear references to various learning theories David Kolb's Experiential Learning Cycle is the one we hear referred to most often. While many trainers make this linkage, we find that many outdoor management programs focus on the "activities" to the exclusion of other critical parts of this theory. Future research needs to focus on the conceptual framework of outdoor management training. Only in this way can these programs move past the status of a fad and become a training revolution.

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